

### **DETAILED ACTION**

1. This office action is in response to communications filed 7/7/2011. Claims 2, 5, 10, 13, 18, 28 and 31 are cancelled. Claims 33-34 are new. Claims 1, 3-4, 6-9, 11-12, 14-17, 19-27 and 32-34 are pending in this action.

### ***Response to Arguments***

2. Applicant's arguments filed 7/7/2011 have been fully considered but they are not persuasive.

3. In response to Applicants' arguments on page 9, line 23 - page 10, line 20 that *"In rejecting claim 1 under section 103, the Office Action at page 6 concedes that Davis in view of Fleischer and Alexander fail to teach displaying an abbreviated program title interchangeably with an original program title in a program title field of an electronic program guide at a first location. The Office Action at page 6 contends that Proehl at col. 6, line 60 - col. 7, line 22 describes such features. Applicants disagree. Proehl at the cited passages merely describes that a zoom command may transition an electronic programming guide (EPG) from a first level of detail to a second level of detail and that the different levels of detail may reflect additional stations shown or programming times, or both. Proehl at col. 7, lines 14-18 describes that if the second level of detail is greater than the first level of detail, the font size, the program title areas and the areas spanned by certain periods of time may be reduced to fit the additional information. Merely reflecting additional stations shown or programming times (the additional*

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*detail provided in Proehl in response to a zoom initiated by a user) fails to teach or suggest interchanging a (transmitted) abbreviated program title and a (transmitted) original program title, much less performing that alleged interchange in a program title field of an electronic program guide at a first location as recited in claim 1. Claim 1 is distinguishable from the applied art for at least the foregoing reasons (notwithstanding whether the alleged combination of documents would have been proper).*

*Moreover, Alexander at col. 15, lines 47-55 describes that titles are shortened for display in a grid guide mode of an EPG, and that the entire title is displayed in a detailed description area of the grid guide when a viewer highlights a tile in the grid guide for the corresponding program listing. Thus, one of ordinary skill in the art, starting from Davis, Fleischer, and Alexander, would not have had a reason to include the alleged teaching of Proehl, as doing so would modify the principle of operation in Alexander - namely, the basis for displaying shortened or entire titles. MPEP 2143.01 (VI.) (the proposed modification cannot change the principle of operation of a reference). As the modification of Davis, Fleischer, and Alexander by Proehl is improper, claim 1 is allowable for at least these additional reasons", and similar subsequent arguments regarding claim 32, the Examiner respectfully disagrees. The Applicants should please note that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The combination of Davis, Fleischer, Alexander and Proehl, and not only Proehl, is used to teach the limitations as claimed. Specifically, Davis teaches displaying a title of a program in an EPG based on the size of the cell, such that the title may be displayed in an abbreviated form*

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if the cell is not large enough to display the entire original title (see Davis, col 17, line 43 - col 18, line 22 and Fig. 11a). Alexander teaches that the original title is displayed in full in a detailed section of the EPG (see Alexander, col 15, lines 47-55). Proehl teaches that a user may use a zoom function of the EPG for different levels of detail of the EPG such that by zooming in or out, more or less details are provided (see Proehl, col 6, line 60 - col 7, line 32). By combining the systems, then, the function of zooming would be performed such that, as the user zooms in, the details of the zoomed cell would be less and less, as, for example, the text gets larger, such that the full/original title is not able to be displayed, and the abbreviated title is instead displayed, and vice versa for the zooming out of the cell, with the full/original title being able to be displayed. This zooming out and in of the cell such that either the full title or the abbreviated title is displayed, as taught by the combination of Davis, Fleischer, Alexander and Proehl, then, reasonably meets the limitation of “wherein the transmitted abbreviated program title and the transmitted original program title are configured to be interchanged in a program title field of the electronic program guide at a first location”. Furthermore, the combination does not modify the principle operation of Alexander, as the detailed description of the program/selected title is still presented. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to Applicants’ arguments regarding newly added claims 33-34, the Applicants should please note that the newly presented combination of Davis, Fleischer,

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Alexander, Proehl and Grefenstette is used to teach the limitations of claim 33, and the previously presented combination of Davis, Fleischer, Alexander, Proehl and Kudrolli is used to teach the limitations of claim 34 (please see rejection below).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 9, 17, 21-23, 25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (of record) in view of Fleischer (of record), Alexander (of record) and Proehl (of record).

Regarding claims 1, 9, and 17, Davis discloses a method comprising:

determining at least two meaningful words in an original program title of an electronic program guide (the text fit system found the words “BEST,” “SHOW,” and “TODAY,” as being meaningful for display, but in reduced 60 and 30 minute grid slots found the words “BEST” and “SHOW” as being more meaningful than the word “TODAY”, see Davis, Fig. 11a and col 18, lines 12-21 and lines 35-43 and col 19\*, lines 38-43);

wherein each of the at least two meaningful words appears at least once in a database storing program titles (see Davis, col 18, lines 44-47),

the at least two meaningful words including a first word and a second word (see Davis, Fig. 11a);

selectively removing a less descriptive word from the program title (see Davis, col 18, lines 12-21 and Fig. 11a);

determining a plurality of essential words of the program title based on a meaning of the program title, wherein the plurality of essential words convey the meaning of the program title (see Davis, col 17, lines 60-67 and Fig. 11a);

determining the number of characters necessary to display the plurality of essential words (see Davis, col 18, lines 1-3); and

removing an essential word if the number of characters necessary to display the plurality of essential words is greater than a specified number of characters, to create an abbreviated program title (see Davis, col 18, lines 1-18 and lines 35-43 and Figs. 11a);

transmitting the abbreviated program title to a client device (see Davis, col 8, lines 42 - 47); and

displaying the abbreviated program title in a program title field of the electronic program guide (Figs. 5a-5c, 7a-7c, and 11a).

Davis does not specifically disclose determining that the first word appears in the database at a greater frequency than the second word,

determining that the first word is a less descriptive word in response to determining the first word appears in the database with a greater frequency than the second word, or

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transmitting the original program title to the client device,

wherein the transmitted abbreviated program title and the transmitted original program title are configured to be interchanged in a program title field of the electronic program guide at a first location.

In an analogous art relating to a system for condensing text by determining words and phrases of greatest significance, Fleischer discloses determining how frequently words and word phrases appear and determining that words and word phrases that appear less frequently have greater significance (Fleischer discloses if the noun phrase “black cat” appears 20 times in a document and the noun phrase “green cat” appears 15 times in the document, the phrase “green cat” is maintained in the summarized text, since it is not as frequently used and is determined to be more suggestive of the document’s subject, see Fleischer, col 1, lines 55-59, col 3, lines 18-22, 27-30 and 40-50 and col 4, lines 53-64).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify Davis’ system to include the limitations as taught by Fleischer for the advantage of providing automatic means for providing a sufficient synopsis of material for a reader (see Fleischer col 1, lines 25-31).

Davis and Fleischer does not specifically disclose transmitting the original program title to the client device,

wherein the transmitted abbreviated program title and the transmitted original program title are configured to be interchanged in a program title field of the electronic program guide at a first location.

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In an analogous art relating to a system for displaying an EPG, Alexander discloses transmitting an original program title to a client device (see Alexander, col 15, lines 47-53).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Davis in view of Fleischer to include the limitations as taught by Alexander for the advantage of providing a more detailed view and description of programming when desired.

Davis in view of Fleischer and Alexander does not specifically disclose wherein the transmitted abbreviated program title and the transmitted original program title are configured to be interchanged in a program title field of the electronic program guide at a first location.

In an analogous art relating to a system for displaying an EPG, Proehl discloses displaying programming titles in an electronic programming guide such that a user may zoom to display different levels of the EPG, such that the program title areas may be reduced or increased (see Proehl, col 6, line 60- col 7, lines 22), and the combination of Davis, Fleischer, Alexander and Proehl discloses wherein the transmitted abbreviated program title and the transmitted original program title are configured to be interchanged in a program title field of the electronic program guide at a first location (Davis teaches displaying a title of a program in an EPG based on the size of the cell, such that the title may be displayed in an abbreviated form if the cell is not large enough to display the entire original title (see Davis, col 17, line 43 - col 18, line 22 and Fig. 11a). Alexander teaches that the original title is displayed in full in a detailed section of the EPG (see Alexander, col 15, lines 47-55). Proehl teaches that a user may use a zoom function of the EPG for different levels of detail of the EPG such that by zooming in or out, more or less details are provided (see Proehl, col 6, line 60 - col 7, line 32). By combining the systems, then,

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the function of zooming would be performed such that, as the user zooms in, the details of the zoomed cell would be less and less, as, for example, the text gets larger, such that the full/original title is not able to be displayed, and the abbreviated title is instead displayed, and vice versa for the zooming out of the cell, with the full/original title being able to be displayed. This zooming out and in of the cell such that either the full title or the abbreviated title is displayed, as taught by the combination of Davis, Fleischer, Alexander and Proehl, then, reasonably meets the limitation of “wherein the transmitted abbreviated program title and the transmitted original program title are configured to be interchanged in a program title field of the electronic program guide at a first location”.

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Davis in view of Fleischer and Alexander to include the limitations as taught by Proehl for the advantage of providing different formats of display to the user.

Regarding claims 21-23, Davis in view of Fleischer, Alexander and Proehl disclose parsing text of the program title (see Davis, col 17, lines 48-50, 60-67, col 18, lines 1-3, 13-21 and Figs. 10A and 11a);

determining at least one nonessential, nonrelational word of the program title (see Davis, col 18, lines 12-21, col 19, lines 38-43 and Figs. 10A and 11a); and

removing the nonessential, nonrelational word from the program title (see Davis, Figs. 10A and 11a).

Regarding claim 25, Davis in view of Fleischer, Alexander and Proehl discloses a head end device (see Davis, Fig. 1).



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Regarding claim 32, Davis in view of Fleischer, Alexander and Proehl discloses wherein the transmitted abbreviated program title and the original program title are configured to be interchanged in the program title field responsive to a zoom command (Davis teaches displaying a title of a program in an EPG based on the size of the cell, such that the title may be displayed in an abbreviated form if the cell is not large enough to display the entire original title (see Davis, col 17, line 43 - col 18, line 22 and Fig. 11a). Alexander teaches that the original title is displayed in full in a detailed section of the EPG (see Alexander, col 15, lines 47-55). Proehl teaches that a user may use a zoom function of the EPG for different levels of detail of the EPG such that by zooming in or out, more or less details are provided (see Proehl, col 6, line 60 - col 7, line 32). By combining the systems, then, the function of zooming would be performed such that, as the user zooms in, the details of the zoomed cell would be less and less, as, for example, the text gets larger, such that the full/original title is not able to be displayed, and the abbreviated title is instead displayed, and vice versa for the zooming out of the cell, with the full/original title being able to be displayed. This zooming out and in of the cell such that either the full title or the abbreviated title is displayed, as taught by the combination of Davis, Fleischer, Alexander and Proehl, then, reasonably meets the limitation of “wherein the transmitted abbreviated program title and the transmitted original program title are configured to be interchanged in a program title field of the electronic program guide at a first location).

7. Claims 3-4, 8, 11-12, 16, 19-20 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (of record) in view of Fleischer (of record), Alexander (of record) and

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Proehl (of record), as applied to claims 1, 9 and 17 above, and further in view Kudrolli (of record).

Regarding claims 3, 11, and 19, Davis in view of Fleischer, Alexander and Proehl discloses parsing text of the program title (see Davis, col 17, lines 48-50 and lines 60-67, col 18, lines 1-3 and lines 13-21 and Figs. 10A and 11a),

determining at least one nonessential, nonrelational word of the program title (see Davis, col 18, lines 12-21, col 19, lines 38-43 and Figs. 10A and 11a); and

removing the nonessential, nonrelational word from the program title (see Davis, Figs. 10A and 11a), but does not specifically disclose determining at least one relational word of the program title; and

replacing the at least one relational word with a representative character.

In an analogous art relating to a system for abbreviating text, Kudrolli discloses replacing the word “and” with the character “&” in order to cope with display space constraints in computer software (Fig. 20).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Davis in view of Fleischer, Alexander and Proehl to include the limitations as taught by taught by Kudrolli for the advantage of further conserving display space, thereby making program guides more useful for a viewer and more pleasant to watch (see Davis, col 2, lines 38-41).

Regarding claims 4, 12, and 20, Davis in view of Fleischer, Alexander and Proehl , and further in view of Kudrolli discloses, in addition to the limitations of claims 3, 11 and 19,

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abbreviating at least one of the plurality of essential words if the number of characters necessary to display the plurality of essential words is greater than the specified number of characters (see Kudrolli, col 7, lines 48-55).

Regarding claims 8 and 16, Davis in view of Fleischer, Alexander and Proehl, and further in view of Kudrolli discloses wherein an essential word occurring most frequently in the database is removed (see, Kudrolli, col 7, lines 40-47).

Regarding claim 34, Davis in view of Fleischer, Alexander and Proehl, and further in view of Kudrolli discloses wherein at least one of the plurality of essential words has letters omitted from it in the abbreviated program title (see Kudrolli, Figs. 11 and 20).

8. Claims 6-7 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (of record) in view of Fleischer (of record), Alexander (of record) and Proehl (of record), as applied to claims 1, 9 and 17 above, and further in view of Witbrock et al. (US6317708, hereinafter Witbrock).

Regarding claims 6 and 14, Davis in view of Fleischer, Alexander and Proehl does not specifically disclose that the at least one nonessential, nonrelational word comprises all of the words selected from the group consisting of prepositions and articles.

In an analogous art relating to a system for creating summaries of text, Witbrock discloses at least one nonessential, nonrelational word comprises all of the words selected from the group consisting of articles (the article "the" is removed, see Witbrock, col 3, table 1 - col 4, Table 2).

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It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Davis in view of Fleischer, Alexander and Proehl to include the limitations as taught by Witbrock for the advantage of efficiently providing abbreviated program descriptions, including program titles, such that the summary text provides accurate representation of the original text, while conserving display space.

Regarding claims 7 and 15 Davis in view of Fleischer, Alexander and Proehl, and further in view of discloses the at least one essential word comprising all of the words selected from the group consisting of subjects, objects, and verbs (the subject, i.e., Security Council, as well as the verb “address”, is kept, see Witbrock, col 3, table 1 - col 4, Table 2).

10. Claims 24, 26, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (of record) in view of Fleischer (of record), Alexander (of record) and Proehl (of record), as applied to claims 1, 9 and 17 above, and further in view of Wehmeyer (of record).

Regarding claim 24, Davis in view of Fleischer, Alexander and Proehl discloses that the program listings data are edited through the use of a processor executing a text fit interactive computer program (see Davis, col 17, lines 44-46), that program listings can be listed in an interactive program guide implemented on a cable converter box, the converter box containing processor and memory capabilities (see Davis, col 20, lines 1-4), and that the program schedule information is downloaded and stored in the converter box memory and can be controlled locally (see Davis, col 20, lines 18-21, 24-26), but does not specifically disclose that the text fit system is implemented on a set-top box.

In an analogous art relating to a system for customizing EPG information, Wehmeyer discloses an interface for locally customizing program guide information containing program descriptions (see Abstract) in a cable converter box (see Wehmeyer, col 10, lines 51-62). Generic program guide information, including program identifiers, is received and stored in the cable converter box (see Wehmeyer, col 11, lines 11-22). The user may edit text in a cell of the electronic program guide (EPG) by highlighting a cell, selecting an edit text mode key, and entering the desired text. For example, the user may change the text "THE GOLDEN ERA" to "THE ERA" (col 16, lines 50-64 and Fig. 8).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Davis in view of Fleischer, Alexander and Proehl to include the limitations as taught by Wehmeyer for the advantage of provide users with ways to customize the program guide list (see Wehmeyer col 2, lines 13-15).

Regarding claims 26 and 27, Davis in view of Fleischer, Alexander and Proehl, and further in view of Wehmeyer wherein the set-top box receives signals through a satellite network (see Davis, col 5, lines 26-28), and wherein the set-top box is connected to a television, and wherein the television is the display device (see Davis, col 21, lines 4-8 and Fig. 12).

8. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis (of record) in view of Fleischer (of record), Alexander (of record) and Proehl (of record), as applied to claim 1 above, and further in view of Grefenstette (US6289304, hereinafter Grefenstette).

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Regarding claim 33, Davis in view of Fleischer, Alexander and Proehl discloses determining nonessential, nonrelational words, but does not specifically disclose wherein the program title comprises a single noun and at least two adjectives, and wherein the nonessential, nonrelational word is determined to be a first of the at least two adjectives that is furthest from the single noun.

In an analogous art relating to a system for text summarization, Grefenstette discloses text comprising a single noun and at least two adjectives, and wherein a nonessential, nonrelational word is determined to be a first of the at least two adjectives that is furthest from the single noun (see Grefenstette, Figs. 4, 5 and 7).

It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Davis in view of Fleischer, Alexander and Proehl to include the limitations as taught by Grefenstette for the advantage of efficiently providing abbreviated/summarized program descriptions, including program titles, such that the text may be efficiently summarized based on the parts of speech.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHENEA SMITH whose telephone number is (571)272-9524. The examiner can normally be reached on 8:00 am - 4:00 pm, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHENEA SMITH/

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Examiner, Art Unit 2421

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